

METHOD AND APPARATUS FOR ACCURATE DIGITAL-TO-ANALOG
CONVERSION

ABSTRACT OF THE DISCLOSURE

5

A digital-to-analog converter includes a plurality of current sources, a differential amplifier, and a plurality of switching modules. The plurality of switching modules is operably coupled to the plurality of current sources and the digital amplifier module provides the analog output for the digital-to-analog converter. Each of the plurality of switching modules has a corresponding current source of the plurality of current sources, where a 1st set of the plurality of switching modules couples the corresponding current sources to the differential amplifier module in a 1st manner based on a digital input value and a 2nd set of the plurality of switching modules couples the corresponding current sources to the differential amplifier in a 2nd manner based on the digital input values such that, over time, errors introduced by the coupling in the 1st manner substantially compensates for errors introduced by the coupling in the 2nd manner.

10

15